

CLAIM AMENDMENTS

1-16 (canceled)

17. (currently amended): A ~~composition of matter which consists of a~~ plugged stratum ~~comprising which consists of~~ a permeable stratum treated with a ~~biofilm which comprises~~ an elastic exopolysaccharide ~~which exopolysaccharide is the exopolysaccharide~~ produced by a bacterium which has the characteristics that it is Gram negative, bacilliary, about 0.2X0.8 μm , facultative anaerobe, grows between 15° and 45°C with a temperature optimum of 37°C, grows between pH 4-11 but not at pH 2, grows in AB13 medium or minimal medium, is motile, lacks a capsule, and lacks spores~~[[]]~~; and

which plugged stratum has a saturated hydraulic conductivity equal to or less than 1.5×10^{-5} cm/sec.

18. (currently amended): The ~~composition~~ plugged stratum of claim 17, ~~wherein the permeable stratum which~~ is an open conduit.

19. (currently amended): The ~~composition~~ plugged stratum of claim 17, ~~wherein the plugged stratum comprises which is~~ a subsurface cutoff wall.

20. (currently amended): The ~~composition~~ plugged stratum of claim 17, ~~wherein the plugged stratum which~~ is a subsurface liner of compacted soil.

21. (currently amended): The ~~composition~~ plugged stratum of claim 17, ~~wherein the plugged stratum includes which is~~ a geotextile.

22. (currently amended): The ~~composition~~ plugged stratum of claim 17, wherein the plugged stratum has a saturated hydraulic conductivity equal to or less than 1.0×10^{-7} cm/sec.

23. (currently amended): The ~~composition of claim 17~~ plugged stratum of claim 17, ~~wherein the plugged stratum~~ which has a saturated hydraulic conductivity equal to or less than 1.5×10^{-8} cm/sec.

24. (currently amended): The ~~composition~~ plugged stratum of claim 17, wherein said bacterium further comprises the characteristics of an antibiotic sensitivity profile as in Table 2, a biochemistry profile as in Table 3, and a carbon utilization profile as in Table 4.

25. (currently amended): The ~~composition~~ plugged stratum of claim 24, wherein the bacterium is that deposited as ATCC No. PTA2500.

26. (new): The plugged stratum of claim 17 wherein the stratum has been treated with an isolated nutrient-containing culture of a bacterium that produces said elastic exopolysaccharide.